



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,814	12/09/2003	Kenji Ando	CU-3482 RJS	5740

26530 7590 10/31/2006

LADAS & PARRY LLP
224 SOUTH MICHIGAN AVENUE
SUITE 1600
CHICAGO, IL 60604

EXAMINER

JACOB, MARY C

ART UNIT PAPER NUMBER

2123

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,814

Applicant(s)

ANDO ET AL.

Examiner

Mary C. Jacob

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/17/04; 9/23/04.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-16 have been presented for examination.

Information Disclosure Statement

2. It is noted that "Patent Abstracts of Japan" publication number 2002-288507 was submitted with the file, but was not listed on the IDS. This reference has been considered.

Specification

3. The disclosure is objected to because of the following informalities. Appropriate correction is required.
4. Page 4, lines 25-26 recite, "a method of designing, producing and painting paint" in which it appears that "painting paint" is an error.

Claim Interpretation

5. Office personnel are to give claims their "**broadest reasonable interpretation**" in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See *also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow") The reason is

simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed

An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.

6. The preamble of claim 1 recites the following "a method of designing paint for a server computer". However, the Abstract, Summary of the Invention as well as independent claim 14 all recite the invention as being directed to a method of designing paint *on* a server computer, not *for* a server computer, and there are no limitations recited in the body of claims 1-13 that would lead to the interpretation that this method is directed to designing paint *for* a server computer. Therefore, claims 1-13 were interpreted to be directed to "a method of designing paint *on* a server computer".

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention..

9. Claims 1 and 14 recite the limitation "the ingredient determined paint" in lines 9-

10. There is insufficient antecedent basis for these limitations in the claims.

Art Unit: 2123

10. Claim 14 recites the limitation "the paint" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 1-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims appear to be a recitation of abstract ideas, for example, "determining ingredients", "predicting performances", "verifying the predicted performances", and further, fail to produce a concrete, useful or tangible result. The steps of "determining ingredients", "predicting performances", "verifying the predicted performances" do not recite an output or use of a "real world result".

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1-6, 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al (US Patent 5,907,495).

15. Snyder et al teaches: (claims 1 and 14) a method of designing paint for a server computer, comprising the steps of: acquiring color numerical information of a designated color from a client computer connected to the server computer (column 3, lines 32—47; column 4, lines 9-26; column 10, lines 53-60); determining ingredients of the paint based on the acquired color numerical information and paint ingredient information (column 2, lines 10-13; column 11, lines 61-65; Figure 4, elements 405-409); (claims 2 and 15) converting color information corresponding to a color into the color numerical information (column 3, lines 20-47); (claim 3) wherein the client computer has a three dimensional color display unit through which the designated color is input (column 4, lines 16-26; Figure 6 and description); (claim 4) wherein the ingredients of the paint are determined by computer color matching (column 11, lines 45-60); (claim 6) wherein the color numerical information acquired from the client computer is one of a multi angle spectral reflection factor and a various angle spectral reflection factor (column 3, lines 41-61); (claim 8) a method of producing paint, comprising the steps of: designing the paint as claimed in claim 1 and producing the

ingredient-determined paint (column 8, lines 57-63; Figure 2, elements 205-207; Figure 4, elements 407-409); (claim 9) mixing paint ingredients at a painting line side based on the determined ingredients thereby to form the ingredient-determined paint as claimed in claim 1 (column 8, lines 57-63; Figure 2, elements 205-207; Figure 4, elements 407-409); (claim 10) painting an object with the produced paint as claimed in claim 8 (column 8, lines 57-63; Figure 2, elements 205-207; Figure 4, elements 407-409); (claim 11) painting an object with the mixed paint as claimed in claim 9 (column 8, lines 57-63; Figure 2, elements 205-207; Figure 4, elements 407-409); (claim 12) a computer program for causing a computer to perform the method of designing paint as claimed in claim 1 (column 8, line 63-column 9, line 3; column 12, lines 14-26; Figure 7). As to claim 13, Snyder et al teaches a computer program performing the method of designing paint as claimed in claim 1 (column 8, line 63-column 9, line 3; column 12, lines 14-26; Figure 7), such as Microsoft Excel, and it is understood that this computer program must be stored on a computer readable recording medium in order to be executed to perform the method as taught by Snyder et al.

16. Snyder et al does not expressly teach (claims 1, 14) predicting performances of the ingredient determined paint based on paint performance prediction information, verifying the predicted performances of the ingredient-determined paint, (claim 5) wherein at least one of painting workability, coating film performance, and paint performance is predicted as the performance of the ingredient-determined paint.

17. Snyder et al teaches that paint validation, the successful conformance testing of paint against predetermined criteria, is well known in the art, and that validated paint

has known physical properties and performance characteristics including adhesion characteristics, resistance to sag, high humidity, durability, chip resistance and ultra-violet exposure durability (column 6, lines 39-48).

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the design of paint as taught by Snyder et al to further include the prediction and verification of the performance of the paint since Snyder et al teaches that paint validation, the successful conformance testing of paint against predetermined criteria, is well known in the art (column 6, lines 39-48).

19. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder et al as applied to claims 1 and 14 above, in view of Stat-Ease, Inc. ("Design-Expert Software Version 6 User's Guide, pages 1-1-1-3, 7-1-7-38, 2000), herein referred to as "Stat-Ease".

20. Snyder et al teaches predicting and verifying the predicted performance of ingredient-determined paint.

21. Snyder et al does not expressly teach wherein the step of verifying the predicted performances of the ingredient-determined paint further comprises the step of representing goodness of fit with discrete value between required performances stored in a database and the predicted performances of the ingredient-determined paint.

22. Stat-Ease teaches Design-Expert software that is used for design of experiments that is used to optimize a product or process being designed and offers the designer additional experimental designs, flexibility and various analysis tools (pages 1-1-1-2).

Art Unit: 2123

Stat-Ease teaches the use of Design expert for mixture experiments (page 7-1, paragraph 1), wherein the mixture is designed by entering mixture components (pages 7-2-7-5), the experiment on the mixture is run (page 7-5, last paragraph) and the results are analyzed by studying the goodness of fit of the results, providing a list of actual verses predicted response values, plotting residuals verses predicted values, and a plot to show deviation of a mixture from a reference blend (pages 7-10-7-17).

23. Snyder et al and Stat-Ease are analogous art since they are both directed to the design of a mixture and the prediction and verification of the performance of the mixture.

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the predicting and verifying the predicted performance of ingredient-determined paint as taught by Snyder et al to further include representing goodness of fit with discrete values between the required performance and the predicted performance of a mixture as taught by Stat-Ease since Stat-Ease teaches Design-Expert software that is used for design of experiments that is used to optimize a product or process being designed and offers the designer additional experimental designs, flexibility and various analysis tools (pages 1-1-1-2).

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
26. Lawn et al (US Patent 6,842,654) teaches an online algorithm exchange providing access to a plurality of coloring algorithms from any number of developers wherein users can select a particular algorithm for use as well as specify particular color measurements as inputs thereto.
27. Marchand et al (US Patent 6,914,613) teaches a color selection method, which includes the steps of selecting colors in accordance with identification criteria supplied by selecting a desired color chip from color reference chips on the screen, accessing and displaying color formulas and selecting a desired color formula that lists all the ingredients needed to prepare a coating composition.
28. Hirayama et al (US Patent 6,959,111) teaches a computer color-matching apparatus including a colorimeter, a micro-brilliance-feeling measuring device, and a computer in which a plurality of paint blends, color data and micro-brilliance-feeling data corresponding to each of the paint blends, and the color characteristic data and micro-brilliance-feeling characteristic of a plurality of full-color paints are entered.
29. Cheetam et al (US Patent 5,668,633) teaches a method and system for formulating a color match from a set of previously used color formulations.
30. Kubo et al (US Patent 6,744,513) teaches a computer color matching method of paint and a preparing method of paint.

31. Spitzer et al (US Patent 6,768,814) teaches a method of determining a color formula for matching a selected color, wherein the selected color is measured with the aid of the electronic imaging device, the measured color signals of the calibration colors are converted to the known calorimetric data and the color formula is determined that most closely matches the calculated colorimetric data of the measured selected color.

32. Adesko et al (US Patent 5,000,809) teaches a process for forming a composite that is useful as an exterior vehicle part and the testing of the painted part performance.

33. Oien et al (US Patent 4,735,985) teaches a coating composition which has the impact resistance and chip- and abrasion-resistance of polyurethane yet which has excellent adhesion to automobile finishes such as those based upon acrylic materials and teaches the testing of the composition.

Art Unit: 2123

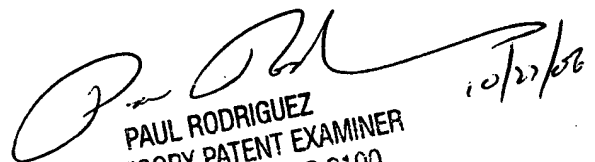
34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary C. Jacob whose telephone number is 571-272-6249. The examiner can normally be reached on M-F 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary C. Jacob
Examiner
AU2123

MCJ
10/26/06


PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
10/26/06